

Attorney Docket No. TEC-023044-US

Remarks/Arguments

I. Discussion of the Amendment

The claims have been amended to provide that the headbox comprises a single layer zone. This amendment is made without prejudice to any rights that applicants may have to file any divisional or continuation applications in this application. There is clear antecedent basis for this amendment in the specification and the drawings. See for example Figure 1 and page 9, lines 5 to 15 of the specification. This amendment does not introduce new matter and should be entered accordingly.

II. Discussion of the Rejection

(A) Priority

Applicants have claimed priority under 35 USC § 119(e) to provisional application Serial Number 60/423,266, filed November 1, 2002. Examiner has rejected this claim for domestic priority stating that:

“the provisional application upon which priority is claimed fails to provide adequate support under 35 USC § 112 for claims 1 to 12.”

Applicants do not agree with this assessment of the situation. Figure 1 of the provisional application and disclosures with respect thereto in the specification of the provisional application provide clear antecedent support for the claims of this application as required under 35 USC § 112. The disclosure of the provisional application shows each and every step of claim 1 and how these steps should be carried out. This objection is clearly inappropriate and should be withdrawn.

As a further basis for the rejection of Applicants claim of priority, Examiner states:

“The provisional application 60/423,266, filed on 11/1/2002. The present application 10/700,228 was filed on 11/3/2003, which is over one year in duration over the filing date of the provisional application.”

Applicants do not agree with this assessment of the situation.

November 1, 2003, the 12 month anniversary of the filing date of the provisional application, was on a Saturday. The present application was filed on November 3, 2003, the next succeeding business day. Public Law 106-113 amended

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35 USC 119(e) (3) to extend the pendency of a provisional application to the next succeeding business day if the 12 month anniversary of the provisional application falls on the weekend or a Federal Holiday. Therefore, this application should be accorded the priority of the provisional application.

(b) Rejection of Claims Under 35 USC § 103

Claims 1 to 11 are rejected under 35 USC § 103 as unpatentable over USP 4,526,653 ("Anderson"). Claim 12 is rejected under 35 USC § 103(a) as being unpatentable over Anderson in view of USP 5,979,664 ("Brodeur"). These rejections are respectfully traversed.

Each of these rejections depends on the extent to which Anderson teaches or suggests the present invention. Accordingly, these rejections will be discussed concurrently.

Anderson discloses a paper machine multilayer headbox 1 used to distribute a paper making stock across a forming wire. The multilayer headbox 1 includes partitions 8 and 9 which physically divide the headbox into three separate spaces 6. Three ultrasonic transducers 39, 40, and 41 are mounted on the partitions near their downstream ends producing acoustic radiation across the existing pulp stream. The transducer provides information about the distance between two channel-forming surfaces in each of the three separate spaces 6. Anderson either alone or in combination with Brodeur does not teach or suggest the invention.

The court has indicated that the prior art must provide sufficient motivation for one of ordinary skill in the art to modify the prior art method with a reasonable expectation that the invention as claimed would result. (See In re Lintner, 173 USPQ 560 (C.C.P.A. 1972), In re Stemniski, 444 F.2d 581, 170 USPQ 343 (C.C.P.A. 1976). The linch pin of the analysis is motivation with a reasonable expectation of success.

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Where the prior art itself provides no apparent basis for concluding that a person of ordinary skill in the art would be motivated to modify the prior art method so as to arrive at the claimed method with a reasonable expectation of success in achieving the advantages of the claimed method. There is no prima facie obviousness. Neither Anderson nor Brodeur provide reasonable motivation to modify the apparatus of these references to arrive at the claimed invention.

One major difference between the claimed invention and the disclosure of Anderson is that a headbox comprising a single layer is used in the claimed invention while Anderson employs a multilayer headbox. There is absolutely no teaching or suggestion in Anderson that partitions 16, 17 and 18 should be removed so as to form a single layer headbox and still provide the advantages of invention of Anderson or for that matter the advantages of this invention. In fact, the invention of Anderson is directed to a control system for a multilayer headbox using an ultrasonic transducer and thus requires the use of the multilayer headbox. Note that in the Anderson invention the very purpose of the ultrasonic transducer is to provide information about the distance between the partitions forming the multilayer headbox. If the partitions and multilayers are not present in the headbox there would be no need or purpose for the distance information from the ultrasonic transducer or for that matter the ultrasonic transducer. Thus, Anderson actually teaches away from the present invention and is "demotivating" in that a modification of Anderson to result in the present invention would render the invention of Anderson unnecessary or inoperable. To teach away from what applicants have done is the very epitome of non-obviousness.

In support of the rejection Examiner states:

"Anderson is silent on the pulp suspension separating into fractions according to the relative sizes of the fibers, however, it would have been obvious, to one skilled in the art at the time

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the invention was made, that at least some of the pulp suspension separating into fractions according to the relative sizes of the fibers would occur in each of the stock partitions of Anderson, since the system of Anderson is undergoing the same operation under the same conditions as recited in the present invention."

This is nothing more than an unsubstantiated ultimate conclusion. There is absolutely no basis for concluding that any pulp separation occurs in the short distance that the pulp travels from when exposed to ultrasonic and exits the headbox. Moreover, there is absolutely no indication that the strengths or duration of the ultrasonic signal or the positioning of the transducer for distance measurements is sufficient to induce pulp separation.

This rejection is clearly inappropriate and should be withdrawn.

Respectfully Submitted,

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